Case 2:02-cv-03830-LDD Document 334-6 Filed 05/23/2008 Page 1 of 32

# Exhibit "E"

#### ORIGINAL TRANSCRIPT

IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

AGERE SYSTEMS, INC., CIVIL ACTION CYTEC INDUSTRIES, INC., FORD MOTOR COMPANY, SPS TECHNOLOGIES LLC and TI GROUP AUTOMOTIVE SYSTEMS LLC

Plaintiffs

V

ADVANCED ENVIRONMENTAL TECHNOLOGY CORPORATION, ET AL.

NO.
Defendants 02-CV-3830 (LDD)

Oral deposition of JAMES F.

ROETZER, Ph.D., taken at the law
offices of Ballard Spahr Andrews &

Ingersoll, LLP, 1735 Market Street

42nd Floor, Philadelphia,
Pennsylvania, on Tuesday,

December 19, 2006, at 9:37 a.m.
before Jennifer Bermudez, a

Registered Professional Reporter, and

Notary Public, pursuant to notice.



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3

ORAL DEPOSITION OF JAMES F. ROETZER, Ph.D., 12/19/06

-	
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18	TECHNOLOGY, INC. LETTER FROM JOHN LEUZARDIR TO
19	ART CURLEY, AUGUST 3 1976, WITH ATTACHMENT
20	1.65
21	2 LEGEND, FIGURE 7 165 3 E-MAIL FROM JIM ROETZER 260
22	TO LEIGH SHORT, GORDON  JAMIESON, SEPTEMBER 14
23	2006, WITH ATTACHED EXPERT REPORT
24	EVERKI KELOKI

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1	point we were asked to address the
2	issue of drum wastes and potential
3	accelerated degradation of drums and
4	the impact of that on the site.
5	Q. And you were asked to do
6	that by Ashland's lawyers?
7	A. I believe so.
8	Q. Did any other changes, any
9	other modifications to what you
10	thought your scope of work was to be?
L1	A. Not that I recall, no.
12	Q. How was the work initially
L3	divided between you, Leigh and
L4	Gordon?
L5	A. Well, the division was
16	primarily based on expertise. The
L7	site geography, geology, hydrogeology
18	issues were within Gordon's
19	expertise.
20	The chemistry issues were
21	within my expertise. And we had the
22	most experience with issues with
23	waste drums, drum degradation.
24	Q. So did there come a time
	₹

ORAL DEPOSITION	OF	JAMES	F.	ROETZER,	Ph.D.,	12/19/	06
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1	after you reviewed the Vandeven and
2	Exner report that you met with Leigh
3	or Gordon to discuss who was going to
4	be doing what?
5	A. We didn't meet face to
6	face.
7	Q. Did you have a
8	conversation?
9	A. We did have conversations,
10	yes.
11	Q. Telephone conversations?
12	A. That would be telephone,
13	yes.
14	Q. And what did you discuss
15	during your phone conversations?
16	A. Well, general we
17	discussed general approaches to the
18	issues, as well as the work
19	assignments.
20	Q. Did each of you review all
21	of the documents that are listed in
22	your that are attached and listed
23	in your expert report?
24	A. Not that I know of. I

1	think each person reviewed the
2	information he needed to do his part
3	of the report.
4	Q. So what was your part of
5	the report, when you say each person
6	reviewed documents for their part?
7	If you want to refer me to the
8	specific section.
9	A. By sections?
10	Q. $Uh-huh$ .
11	A. Again, I think we can
12	identify the primary authors of
13	different sections, if that's
14	helpful. That may be the best way to
15	do it.
16	Q. Okay.
17	A. I think Gordon had the lead
18	role on the introduction and history.
19	1.2 the summary really evolved from a
20	summary of the opinions.
21	Q. Okay.
22	A. Section 2, the basis of
23	opinions. I would say 1A I probably
24	was the primary author. 1B also. I

1	would say 1C I probably authored but
2	I had some input from a little bit
3	of input from my partners on that.
4	Q. From both partners?
5	A. Yes. I think Gordon with
6	respect to the site history and such,
7	and Leigh had some experience with
8	metal finishing wastes.
9	Q. Okay.
10	A. 1D I would say I was the
11	primary author. Opinion 2 I would
12	say 2A I think I was the primary
13	author of that. 2B, Gordon was the
14	primary author of that. 3A, Gordon
15	was the primary author.
16	Q. How about 2C?
17	A. I'm sorry, did I skip one?
18	2C, I think Leigh was the primary
19	author there.
20	Q. Okay.
21	A. 3A, Gordon was the primary
22	author. And 3B, I was the primary
23	author.
24	Q. Do you believe that you

1	have expertise related to each of the
2	expert opinions in this expert report
3	that we have marked as Exhibit 1?
4	A. I think I I have some
5	expertise in all of those areas, but
6	certainly nowhere near the expertise
7	as Gordon with respect to
8	hydrogeology. And Leigh has more
9	experience with the areas where he
10	was the primary author.
11	So certainly I don't
12	disagree with the opinions expressed
13	by my partners, but I would defer to
14	their opinion.
15	Q. Are they your opinion also?
16	Is everything in this report your
17	opinion also?
18	A. As I said, there's nothing
19	I disagree with in the report.
20	Q. But you didn't necessarily
21	create all the opinions?
22	A. But I didn't necessarily
23	create all the opinions.
24	Q. I didn't hear you.

1	A. Yes. I did not necessarily
2	create all the opinions.
3	Q. Okay.
4	How physically did the
5	report get put together?
6	A. I ended up putting the
7	report together, assembling the
8	pieces.
9	Q. So was it that you drafted
10	a part and Leigh drafted a part and
11	Gordon drafted a part and you
12	compiled them into one?
13	A. That's correct.
14	Q. And how were those
15	documents transmitted to you?
16	A. They were transmitted I
17	think all of them probably came via
18	e-mail.
19	Q. And as separate, were they
20	Word documents?
21	A. Yes. They probably would
22	have been a Word document.
23	Q. Did you print out any of
24	the separate pieces of the report

1	that may have been e-mailed to you at
2	any time?
3	A. I don't believe so.
4	Q. Did you retain copies of
5	those different sections of the
6	report in any way?
7	A. No. Those I mean, I
8	merged them into one document that I
9	worked on and edited.
10	Q. So did you also save a
11	separate copy of the pieces that you
12	were working on as a separate
13	document?
14	A. No. No. Those pieces got
15	merged into one document.
16	Q. But, I mean, was there a
17	separate document, just with respect
18	to the pieces that you drafted, I
19	mean did you have a document that you
20	merged or did you open that one
21	document that you were working on and
22	overwrite the stuff?
23	A. My best recollection is I
24	took the pieces, the input from

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1	Gordon and Leigh and merged them into
2	sort of my master document.
3	Q. So you only had one Word
4	document that you were working off of
5	the whole time; is that correct?
6	A. Correct.
7	Q. Did you save a copy of your
8	drafts of this document?
9	A. I didn't save any drafts.
10	I believe that there were the drafts
11	that were sent to the attorneys I
12	believe survived, but as far as I
13	know those are the only drafts that
14	exist.
15	Q. So just to be clear, when
16	you actually physically started
17	typing your report in this matter you
18	saved it as a Word document; is that
19	correct?
20	A. Correct.
21	Q. And any changes that you
22	made to that initial document were
23	overwrote, the initial document; is
24	that correct?

1	source are	ea.	Do	you ne	eed a pen?	
2	<b>A</b> .	Wel	1, t	here	is source area	
3	certainly	in	thes	e hot	spots here	
4	(indicati:	ng).				
5	Q .	Can	you	writ	e SA for source	
6	area, and	if	you	can d:	raw a circle or	
7 `	some bound	dary	so	we kno	ow what you are	
8	referring	to.				
9	<b>A</b> .	I'm	not	real	ly prepared to	
10	draw a ci:	rcle	aro	und t	he entire	
11	source are	ea.	Ιt	hink	Gordon can	
12	address t	nat	ques	tion.	But certainly	
13	these are	as h	ere	were	involved in	
14	disposal,	but	I 'm	not	going to try	
15	to put li	nits	on	it and	d recall	
16	Q.	Whe	n yo	u say	"these areas,"	
17	which are	as a	re y	ou re	ferring to?	
18	<b>A</b> .	₩e1	.1, t	he ho	t spots in the	
19	area down	the	hil	1 fro	m hot spot 2	
20	and 3.					
21	Q.	So	when	you	say in your	
22	report on	ly t	w o w	ells	near the source	
23	area, are	уоч	ı tel	ling	me now that you	
24	can't tel	1 me	wha	t exa	ctly you meant	

1	by the source area?
2	A. Well, those wells were on
3	the property near the sources of
4	disposal and were not the wells
5	that were down the potentially
6	impacted down gradient wells.
7	Q. Which wells are you
8	referring to?
9	A. I'm sorry, 20 and 21.
10	Q. So wells 20 and 21 were
11	can you repeat what you just said
12	with respect to those wells?
13	A. Well, those wells are
14	basically on the property and not the
15	farther down gradient wells.
16	Q. There are farther
17	A. Those wells are on the
18	property near the source areas as
19	opposed to the down gradient wells
20	where we don't see the low pHs.
21	Q. And what are some of the
22	monitoring well locations that are
23	not near the source area?
24	A. Well, they are not shown on

this figure. Again, I think with
respect to the groundwater data you
will be better off asking your
questions of Gordon.
Q. Did you draft this Opinion
1B? I think you indicated that you
were the primary author?
A. I did. Yes. With input
from Gordon with respect to the
hydrogeology.
Q. And so when you say only
two wells near the source area had
acidic pH values, I guess it's not
clear to me what you are talking
about when you say near the source
areas still.
A. What it is saying is there
is no observation of acidic pHs in
the down gradient wells in the plume.
If there is no depressed pH
in the down gradient wells, then a
contention that acids were mobilizing
metals in the down gradient areas is
not accurate, it's inconsistent with

1	the data.
2	Q. So then this sentence means
3	that there is no acidic pH values in
4	any place where you believe waste was
5	disposed of at the site except for
6	MW20 and MW21; is that correct?
7	A. No. I don't think that's
8	correct. I think with respect to the
9	monitoring well data reported at that
10	time, the first groundwater
11	monitoring data, those were the only
12	two locations that showed acidic pHs.
13	Q. So MW20 and MW21 are the
14	only monitoring wells that show
15	acidic pHs, correct?
16	A. At the time that that data
17	set was collected.
18	Q. And what is the
19	significance of those two wells
20	having acidic pH values?
21	MR. BIEDRZYCKI: Object to
22	the form.
23	THE WITNESS: Well, the
24	significance of those two wells

1	having acidic pH values I think
2	demonstrates that if there was any
3	impact of acids it was a near field
4	impact, it was near the source area.
5	Maybe to back up a step,
6	acids I think even in theory could
7	only impact the mobility of metals
8	where you actually have acidic
9	conditions.
0	If the down gradient plume
L1	is not acidic, then any potential
L2	acid mobilizing effect isn't
L3	occurring there.
L4	BY MS. TROJECKI:
L5	Q. Is it possible that there
L6	would have been an effect or acids
L7	could have mobilized metals when they
18	were first exposed but by the time
L9	that these pH values were taken that
20	effect is no longer demonstrated?
21	A. That's possible, you know,
22	for some of the metals.
23	Q. And then just so the record
24	is clear, on Exhibit 2, Roetzer

1	Exhibit 2, you are not able to
2	identify the areas of the site that
3	you believe are the source area; is
4	that correct?
5	MR. PETTIT: Objection.
6	THE WITNESS: I'm not I
7	can't identify all of the source
8	areas on that map or the extent of
9	the source area.
LO	BY MS. TROJECKI:
L1	Q. And can you identify on
L2	this map what you are talking about
L 3	when you say in the areas down
1.4	grading of the source area?
15	In other words, in the last
16	line of your report you speak about
17	areas down grading of the source
18	area. Can you identify that area on
19	Exhibit 2?
20	A. Well, again, I think you
21	are best off addressing groundwater
22	questions to Gordon, but in general
23	it's heading that way. It's a very
24	rough description. Gordon can

1	provide that in detail.
2	Q. And are you relying on the
3	pH data that's discussed in Page 3 of
4	your report to form the basis of your
5	opinion that the impact of acids
6	would be localized and short-lived,
7	or does this data only support either
8	one term or the other?
9	A. That, as it says in the
10	opinion, supports the localized
11	conclusion, not the short-lived
12	conclusion.
13	Q. And when you speak about
14	down gradient in Paragraph 3 of your
15	report, are you speaking down
16	gradient hydrogeologically,
17	topographically or some other way I'm
18	not aware of?
19	A. Down gradient would
20	generally mean hydrologically.
21	Q. And that's what you mean
22	when you are talking in Paragraph 3
23	of your report, you mean down
24	gradient hydrogeologically?

	_
1	A. I'm sorry, where are you?
2	Q. Page 3. The bottom of Page
3	3, the last line.
4	A. Yes. Down gradient
5	hydrogeologically.
6	Q. And is the direction of the
7	gradient that you are referring to on
8	Page 3 of your report, does that
9	apply to one aquifer, many aquifers?
10	A. I'm going to defer any
11	question on the hydrogeology to
12	Gordon. He can discuss that with
13	you.
14	Q. Do you know how many
15	aquifers are indicated at the
16	Boarhead Farms site?
17	A. No, I don't.
18	Q. Does Opinion 1 does your
19	Opinion 1B mean that any metals in
20	the groundwater at the Boarhead Farms
21	site were not there because of spent
22	acids?
23	A. Not exactly. There are
24	some metals that could be present in

the natural soils.
Q. Does your Opinion 1B mean
that any metals in the groundwater at
the Boarhead Farms site are not there
because of Ashland's spent acid
waste?
A. It's our opinion, again
based on the deposition testimony of
Mr. Curley, that Ashland's spent acid
waste did not contain metals.
Q. But this Opinion 1B does
not mean that metals that could have
been in waste that was generated by
other parties other than Ashland were
in the groundwater because of
Ashland's spent acid waste, does it?
MR. BIEDRZYCKI: Object to
the form.
Go ahead.
THE WITNESS: Yes. Maybe
to clarify, it is possible for acids
to increase the mobility of some
metals, not all, but some.
So it is possible that an

-	and the second of home and home and the
1	acid waste could have, you know in
2	at least the local area, have
3	effected dissolution of metals that
4	were there from other sources.
5	BY MS. TROJECKI:
6	Q. Turning to Page 4 of your
7	report and Opinion 1C, what do you
8	mean by the term other metal
9	treatment wastes in Opinion 1C?
10	A. And this is one of the
11	areas that I think Leigh probably had
12	some input too.
13	But in addition to pickling
14	acids there are certainly other metal
15	cleaning wastes, there are metal
16	plating wastes, there are any number
17	of other waste streams that could
18	contain heavy metals.
19	Q. When you refer to other
20	metal treatment wastes, are these
21	wastes that only contain that
22	contain metals and acids or it's just
23	generally any waste that has metals
24	in it?

1 one to Mr. Jamieson to address. 2 Q. I have understood what you 3 said that there are only certain types of metals that have an 4 5 increased mobility in an acidic state; is that correct? 6 7 That's correct. Α. 8 Q. Is there a class of metals, 9 is there some say class, and when I point on the periodic chart that you 10 would stop at and say from this point 11 12 the left are metals that you have 13 a comfort level of saying as a 14 scientist that in an acidic state the mobility will increase or is that 15 just not a feasible way to be able to 16 17 do that? 18 I would say it's not that 19 Other than, as I think I simple. 20 pointed out in my report, group one and group two metals on the periodic 21 22 table, it's pretty clear. After that 23 it's pretty much metal by metal to 24 see how they behave.

1	Q. And when you say metal by
2	metal, does that would the
3	mobility or lack of mobility depend
4	on not only the metal itself but
5	other circumstances, environmental
6	circumstances?
7	A. Yes. The other the
8	various factors that were discussed
9	earlier.
10	Q. That are contained in your
11	report?
12	A. Yes.
	vo pray, mb_ble -11 T
13	MS. FLAX: That's all I
	MS. FLAX: That's all I have.
14	
14 15	have.
14 15 16	have. Thank you very much.
14 15 16 17	have. Thank you very much. MS. TROJECKI: Can we take
14 15 16 17	have.  Thank you very much.  MS. TROJECKI: Can we take  a brief five-minute break before we
13 14 15 16 17 18 19	have.  Thank you very much.  MS. TROJECKI: Can we take  a brief five-minute break before we  get back?
14 15 16 17 18 19	have.  Thank you very much.  MS. TROJECKI: Can we take  a brief five-minute break before we  get back?  (Recess taken)
14 15 16 17 18	have.  Thank you very much.  MS. TROJECKI: Can we take a brief five-minute break before we get back?  (Recess taken)  DIRECT EXAMINATION (CONTINUED)
14 15 16 17 18 19 20	have.  Thank you very much.  MS. TROJECKI: Can we take  a brief five-minute break before we  get back?  (Recess taken)  DIRECT EXAMINATION (CONTINUED)  BY MS. TROJECKI:

1	acids could have the effect of
2	increasing the degradation of a metal
3	drum?
4	A. That's possible, yes.
5	Q. And do you believe that
6	that could have happened at the
7	Boarhead Farms Superfund site?
8	A. It's possible, yes.
9	Q. Specifically referring to
10	the third line down in Opinion 2C
11	there's a reference to poor waste
12	management practices and that that
13	may have caused drums to be damaged
14	during handling and disposal. Do you
15	see that reference?
16	A. Yes.
17	Q. What is the basis for that
18	statement?
19	A. I would probably defer to
20	Dr. Short for what's in this opinion,
21	however I think I can add that the
22	waste management practices at the
23	site were not good.
24	And I think based on

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1	general experience, as it says,
2	typical of other sites, drums were
3	not necessarily handled with care at
4	this type of site.
5	So I think that's again,
6	you may have to ask Leigh that
7	question, but this is primarily his
8	opinion.
9	Q. I am sorry, can you just
10	A. I just said it was
11	primarily his opinion.
12	Q. And the statement that the
13	presence of water often leads to drum
14	corrosion in time periods of 15 years
15	and perhaps less, what's the basis
16	for the number of 15 years?
17	A. Again, that's based on
18	Leigh's experience at some drum
19	disposal sites that he's worked on.
20	Q. Are you aware of any other
21	basis other than what you have just
22	stated?
23	A. I would say I mean, I
24	have heard that type of number thrown

- [	
1	around. I have not independently
2	studied or verified drum degradation.
3	Q. And why is it that even if
4	accelerated degradation of drums did
5	occur as a result of contact with
6	acid waste that the extent of the
7	groundwater contamination would not
8	have been affected?
9	A. I think that question is
10	best addressed to Dr. Short and Mr.
11	Jamieson.
12	Q. So when you say it's best
13	addressed, does that mean that you
14	are not able to answer it?
15	A. No. It means I don't
16	disagree with it, but they were the
17	primary authors of that opinion.
18	Q. I'm referring to Opinion 3
19	of the report on Page 8. Is it your
20	opinion that the soil remediation
21	response action in OU2 only addresses
22	organic releases?
23	(Discussion off the
24	record.)

1	(The court reporter read
2	back the following:
3	"Q. I'm referring to
4	Opinion 3 of the report on Page 8.
5	Is it your opinion that the soil
6	remediation response action in OU2
7	only addresses organic releases?")
8	THE WITNESS: That's
9	correct.
10	BY MS. TROJECKI:
11	Q. And what are your bases for
12	that opinion?
13	A. That is and, again, to
14	Opinion 3A in particular was drafted
15	by Mr. Jamieson, but I can and I
16	was more responsible for 3B.
17	But certainly based on the
18	ROD and the feasibility study, those
19	two soil hot spot removals were
20	addressing VOC hot spots of TCE.
21	And at the time at least of
22	the ROD benzene, as I said earlier in
23	our subsequent discussions at the

#### CERTIFICATION

I, JENNIFER L. BERMUDEZ, a

Court Reporter in and for the Commonwealth

of Pennsylvania, hereby certify that the

foregoing is a true and accurate transcript

of the deposition of said witness who was

first duly sworn by me on the date and

place hereinbefore set forth.

neither attorney nor counsel for, nor related to or employed by, any of the parties to the action in which this deposition was taken, and further that I am not a relative or employee of any attorney or counsel employed in this action, nor am I financially interested in this case.



Court Reporter and Notary Public

